Notebook Series -- Pocket Notebooks
Notebook, PN-15-11-10

The one dated entry in this pocket notebook is from November 10. It was used by Edison in 1919 or 1920 for notes regarding experimental work, business matters, and other tasks to be performed. Most of the experimental entries pertain to storage batteries, including notes on battery regeneration and automobile starters. The business-related entries include notes on payroll, production efficiency, battery production problems, battery sales summaries, and labor layoffs for efficiency. Also included is the outline of a plan to reorganize the Edison Storage Battery Co. into fifteen departments. The pages are unnumbered. Approximately 30 pages have been used.

PN-(15)-11-10

E-1710

#2998

Get cycles of everything assembled.

Get time per doz or 100 of all operations

Time cycles on everything

Pay rolls of officials by name & office or occupation — of men in all Dept's.

All general men — Trucking pkg Etc —

We had trouble on 3/16 tubes of tubes not flat in grids see how it is now on 1/4 tube opt'd — Follow

Follow up fix up used cells + trace up for putting in Extra pins —

Dont forget room for Regenerating —
Also for Ford Starter —
Keep this in view
Have Hanley make Estimate floor space, 3000 autos daily

Have hang + Park time operations in assembling + Cutter in Lake de Lebanon on Cans —

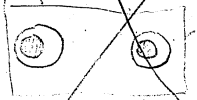
Follow up Smith on the grooving of pockets.

Nov 15th

The wet cell in + then the plate
The + is put in before system
Top is formed. Then the
stamped A4 or B 4 a few
plating by rivetted Operation
In Assembling
they are wrecked

Thin side rubber sheet
are used in all cells.
investigate if Plant
dispense with

I notice posts dont come
up Central through holes
in Top.



Needed all not
all that way

No reason small cells should not be welded by girls —

Note heavy felter cloth bags being made at Assembling room pressure for anodes — terrible resistance, Edgerton try Egant of thinner + the thickness of felter cloth to get drop —

Also if they fried anodes + cloths so they are not mechanically injured by pressure —

Tell Edgerton I have office here + to call to see me of Lake Erie —

If an operation needs nickeling + then relium after welding to assembly why not do operation needs to nickeling + annealing

Monahan — why not make a A4 with grid too small + lines too long + see what is result —

Get VM whole pay roll — work + all + set just what he can have + why is to go get number of Clermont

Note 3rd day

Monahan — Bake 8 plates from stock for 1 hour at 212 + assemble in 004 + test — Dup 2 Regular

About 2 yrs supply of Nails

7 men on 1 truck unloading including drawer & sang sheets awful -!

4 men loading single box sheet on truck
No handling appareils
in Block/Idly Crude barbarous

All kinds stock in storeroom barn in yards all rusted -

Men all over in gutters -
Inspecting Sho

Aunt Corrugated Lies
much worse

Cubby hole offices
Everywhere - all
unsanitary in most
cases -

S B Bally payroll of what
each foreman attends to —
offices same men & rate
wages —

Natrie a slightly
short Ay Cam
not Corrugated
with bad buckles

S B has a Metal scrap
Bales why not
phone wires

Nickel scrap cuddron
& Everywhere

Lead battery scrap
sell at
ton
at Mr Thorrow

Rubber wire scrap
Old Centrifugal Motor
Drum Hunk out used
plating room — old
buckets —

End this day 3
annealfurnace

Anneal long
pots Horrible
shape this dept
is a d—d scandle.

100 bbls of Mixed
scrap in room
where strips are
plated — awful
state of affairs

C11

bottom floor ~~where~~
across from Rolling
Mill. Flooded with
Cu Ni Sol man
Bags everything broke
down - no
overflow to sewers
only hole + no chemicals to
except by accepting
no fall +

Pipe Gallery next
Horrible is also
a stock room
acid + Alkali
Vapors all purely

Big Tanks -
what's in them

Another Copperator
station here
in addition to one
in Main bldg

Meanwhile
Are factory Vacuum
Cleaners made

Manbert wants inspector
at Cement works - put
new man to Go Freight
by Tonnage + in
10 days send B to
Cement works for
2 weeks + report
direct to Manbert.

Possible reason for split tubes

1 = Tampering with loading Mixture
2 = Bad fire, dry of flake + excess NaOH,
3. Tubes too long
4 Diameters too great for quick heat 15 tons
5 Weak steel
6 perforations not right
7 Rings to small or too Large
8 No slip at seams
9 No slip at Ends
10 Steel burned (or oxidized in annealing)
11 High Capacity NaOH,
12 Low dumps too much NaOH for flake –

Enamel Exists by Heat on Cast iron + steel –

2 cc Na Silicate Fair
2 cc Na Silicate 2 gms Litharge good
1 cc Na Silicate 2 gms lead glass, Litharge + NaOH Good
He used 50 gms Pb glass 200 mesh
25 gms Litharge 25 gms NaOH.
fused, then mixed with Na Silicate –

Arrange with Clark Saloonge to Corr Discard Mandels after 2 years by using Metal Tubes are OK

Lunderdale at Bat Co we use also disc Bart diamonds for dressing Emery Wheels instead Carborundum, use commercially

Enamel for Pots.

Feldspar	60
Borax	42
Tin Oxide	12
Soda Ash	15
Saltpeter	2

fuses
1400 to 1500 Fahr

[15]

Go with Lang to see the apparatus on tube block & ribbon plating

On board of Battery at Empty Spaces 1st floor show rack by model of wood & everything else

Also stand the other buildings —

See Auto Varnishing Machine —

Give Payne the penciling from tube gang & from Iron gang to utilize in new Batteries —

Meadocraft Advertising for a Mahanatian after we get of Cup Foundry

For testing leaky Cans got 8 tubes — only 1 can Cans be tested — in a tub Hasts want / Like Culling Bag hole in gate for bag Dog a little hole for puppy —

System of Checking inspectors for tubes who have list of everything to look for & who check Constantly & report changes wrong & o/o discarded — This Independent of Foreman or Managers —

Total loss should not be more than 5 o/o

Tubes should be smaller in Dia sizes

Not to Crowd grades &
give no chance for
Expansion – also tubes
should be 1/3 @ 1/16
shorter to allow expansion

~~Inspector should watch~~
~~strips splitting for spacing~~

In re arranging St Battery
Get rid of risk of fire of
Benzine wash of
Tube pocket clock –

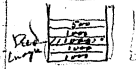
in money Value

Percent of Sales of
Years

A type	71.6	77.7
G	6.1	
B type	18.7	22.3 %
Others	3.6	

Find out where A4 Cons H A6-A10 H
block filled with Kott +
Lithia – Others Co –

Storage Cat instead of
boxes full as index use a
board with slips



Red slips
shows expression
index

This shows whole stock house on
board at a glance

Possibly best way is always to assemble same number of Cells, ½ day A12 ½ day A12H.

If order is for 600 X cells make 1000 - + stock the 400 till next order + so on, or if 1 day makes 1500 + order is only for 600 - then stock 900 - + we won't be bothered for some time, The amount made depending on keeping all the men busy on agreed units.

% on Value at Cost

Sales for Nine years.

A3	.33		M8	2.06	
A4	10.99		M20	.24	2.30
A4H	1.91				
A5	2.17				
A5H	.06				
6	22.82		L 20	.08	
6H	2.17		L 30	.78	
8	14.32	75.49	L.40	.17	1.03
8H	8.12		W 2	.27	
10	5.48				
10H	0.42				
12	6.07				
12H	.63				
B.1	.77				
" 2	1.35				
" 2H	.54				
" 4	4.30	12.41			
" 4H	2.20				
" 6	1.90				
" 6H	1.35				
G 4	2.60				
" 6	59				
" 7	19				
" 9	1.97	8.44			
" 11	2.65				
" 14	.74				
" 18	.30				

See Smith about Diamond
Mfg Towers -

Stat
Reorganize

Waldo Smith
Smith Clement
Lichman
Pauch
Mayer
Monahan
Egerton
Fredschaw

New Inspector now in Gallery

36 M8 Equals 1 A4 Equivalent

350 lbs flake need daily
for 1000 A4.

~~8 Cranes~~ ~~1 Shift~~

250 gals Wash Water
Cu + Zn per Crane hour

Use just enough Cranes for
1000 Cells - Let repair men
in shop ready all go
Rob the other Cranes

2 Stop all ~~tool~~ inferno
only keep enough for
Repair Crew

3 Cut out all tool but
Measures & those absolute
by ~~[illegible]~~ in Research

~~Rubber Falling Mill Co~~
~~Minnamouri~~ –

4 Cut off all deflum
bent 2.

5 Organize M/S Bod daily
work orders for perfect
working

6 Be short of trucks

Yes says 100 lbs green
hydrate Nickel from
old tubes requires
25 lbs Na Hyposulfite
+ 10 lbs Glucose
Equals 1 ½ cents lb
~~Hydrate Co~~ –
4 cents lb Nickel hydrate
6 cents lb Glucose

Organize Balling Co into
Departments

1 Tube Load, & make tubes
+ assemble in grid

2 Punch Presses

3 Screw Machine

4 Load iron + make pockets

5 Stock Rooms

6 Assemble –

7 Chemical + wash water
+ flake, separating +

8 Electrical – Crane, Testing
+ forming

9 Part Plating + strip
annealing

Rolling - 10

Carpenter + painting 11

Machine Shop-Repair 12

M8 - + small - L + anchor 13

Repair 14

Regeneration - 15 -

Repeters Disc on hand 2810

Amberola 7203

Disc-points 3877

Amberola points 3760

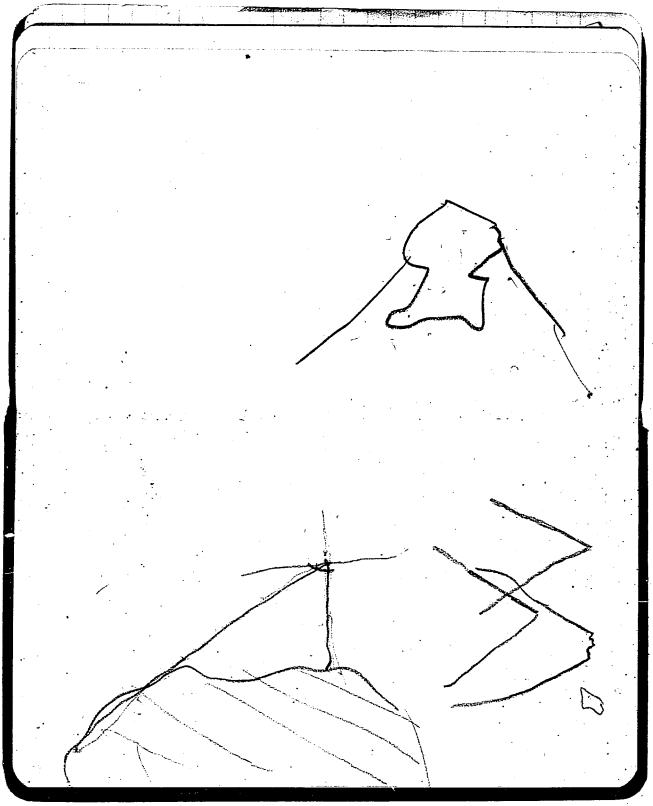
Complete Phonos Disc 45000

" Ambs 19000

Big-Lat never used 40129 K

In addition diamonds in all stages taken to Vault after shut down

Plus all the Mud stuff -

Doughling took Cu Ni Mud
Muddy 3.10 Cu 8.36 gm Ni
Added H_2SO_4, boiled fancy
boiling 50000 gals -
Press Cake Cu 3.10 - 3.57 Ni
Liquor Cu None 4.49 Ni

250
19
225
250
2475
2870